

AMENDMENTS TO THE CLAIMS

Claims 1-22. (Canceled)

23. (Original) A metal plating apparatus comprising:
- a source material electrically connected to a first terminal of a power supply;
 - an object having a plurality of portions to be plated, the object electrically connected to a second terminal of the power supply; and
 - an insulating adjustment plate disposed between the source material and the object in the vicinity of the object, wherein a plurality of windows are provided in said insulating adjustment plate corresponding to the plurality of portions of the object to be plated.
24. (Original) The metal plating apparatus according to claim 23 further comprising: a plating tank filled with a plating solution in which the source material, the object, and the insulating adjustment plate are immersed.
25. (Original) The metal plating apparatus according to claim 23, wherein the windows of said insulating adjustment plate correspond to the plurality of the portions of the object to be plated so that the current density on the object is substantially constant.
26. (Original) The metal plating apparatus according to claim 23, wherein said insulating adjustment plate comprises an electrically insulating material including synthetic resin sheets.
27. (Original) The metal plating apparatus according to claim 26, wherein the synthetic resin sheets comprise polyester resin, polypropylene resin, polyethylene resin, polyvinylidene fluoride, epoxy resin, phenol resin, polyimide resin, or the like.

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28. (Original) The metal plating apparatus according to claim 23, wherein said insulating adjustment plate in the vicinity of the object is not in contact with the object.
29. (Original) A method of forming an equi-voltage surface for plating an object comprising:
providing lines of electric field which are directed to a surface of the object; and
adjusting the lines of electric field to provide parallel lines of electric field
terminating on the surface of the object.
30. (Original) The method according to claim 29, wherein said step of adjusting the lines of electric field also provides an equi-voltage surface on the surface of the object.
31. (Original) The method according to claim 29, wherein said step of adjusting the lines of electric field also provides a uniform density of lines of electric field terminating on the surface of the object.
32. (Original) The method according to claim 29, wherein said step of adjusting the lines of electric field is independent of said step of providing lines of electric field.
33. (Original) The method according to claim 29, wherein said step of adjusting the lines of electric field are separated from the object.
34. (Original) The method according to claim 29, wherein said step of adjusting the lines of electric field is performed by a pair of conductive perforated plates electrically connected to each other.